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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/552,715	04/19/2000	Seiji Umemoto	Q58947	3149

7590

07/02/2002

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EXAMINER

PARKER, KENNETH

ART UNIT PAPER NUMBER

2871

DATE MAILED: 07/02/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/552,715

Applicant(s)

Umemoto

Examiner

Kenneth Parker

Art Unit

2871

-- Th MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 5 6) ☐ Other:

Art Unit: 2871

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The language “disposed near to the incident side surface of said light pipe can be switched on and of” cannot be determined. First, what constitutes “near” cannot be determined, and second, what is meant by “ can be switched on and off” cannot be determined. For examining purposes, it is presumed that this limitation is met by any edge lit device as the bulb is always “near” the edge.

Art Unit: 2871

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1-20 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Umemoto et al, U.S. Patent # 6,199,995.

The disclosure of Umemoto et al lists a different inventorship (the current inventor plus one other), however discloses substantially the same as the instant invention.

4. Claims 1-2 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Higuchi et al, U.S. Patent # 6,224,223.

Art Unit: 2871

Higuchi et al discloses is a light pipe with an upper, lower and incident side surface, the lower is reflective, and output means are on the upper surface, and an LCD is on the upper surface including at least one polarizing plate (see cover figure).

5. Claims 1-2 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Yang et al, U.S. Patent # 6,151,089.

Yang et al discloses is a light pipe with an upper, lower and incident side surface, the lower is reflective, and output means are on the upper surface, and an LCD is on the upper surface including at least one polarizing plate (see cover figure).

Therefore, these claims are anticipated by this reference.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

Art Unit: 2871

the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable Redmond al, U.S. Patent # 5,664,862 in view of Kalamash, U.S. Patent # 5,532,852

Redmond discloses an edge lit back light in figure 10 with an angle of 35-45 degrees at one of the surfaces and 1-15 degrees at the other, in a light pipe with an upper, lower and incident side surface, the lower is reflective, and output means are on the upper surface, and an Lcd is on the upper surface including at least one polarizing plate. The ratio of 8 to one or greater is an overlapping range to the values possible by the Redmond angles, and obvious as it has been judicially determined that overlapping ranges are at least obvious. The width is 200 microns.

Lacking from the disclosure is the use of a polarizer, however a polarizer was part of the conventional LCD, and would have been obvious for that reason. Evidence that it was conventional is in the Patent and Trademark office classification definitions for class 349 search notes: "In this case, nominal cell structure refers to a broad recitation of

substrates, electrodes (or conductive plates or electrical excitation means),

alignment layers, a seal, spacers, and polarizers. ", and in Kalamash's description of the typical active matrix LCD

Art Unit: 2871

Having the transmissivity of greater than 90% would have been obvious as the transmissivity was one of the most well known things to have as close as possible to 100 as possible, and having the bumps be uniform was also a notoriously well known goal and obvious for that reason.

Silver and aluminum were the conventionally employed materials and would have been obvious for that reason.

7. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yang et al, U.S. Patent # 6,151,089.

Yang discloses a light pipe with an upper, lower and incident side surface, the lower is reflective, and output means are on the upper surface, and an Lcd is on the upper surface including at least one polarizing plate.

Yang shows a light pipe with an upper, lower and incident side surface, the lower is reflective (the backside of the LCD), and output means are on the upper surface, the means comprising slopes facing the incident surface of 45 degrees (description of figure 2), and flat surfaces, flat surfaces being much more than 15 times as much area as the sloping surfaces (see abstract). The pitch is 207um in one example, clearly between the claimed values.

Having the transmissivity of greater than 90% would have been obvious as the transmissivity was one of the most well known things to have as close as possible to 100 as

Art Unit: 2871

possible, and having the bumps be uniform was also a notoriously well known goal and obvious for that reason.

Silver and aluminum were the conventionally employed materials and would have been obvious for that reason.

Any assertion that something is well known is a taking of official notice.

Note: Any assertions that an element, practice or relationship was conventional has the incorporated motivations of the benefits of having established supply chains, well understood behavior and manufacturing methodologies.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth Parker whose telephone number is (703) 305-6202. The fax phone number for this Group is (703) 308-7722. Any inquiry of a general nature or relating to the status of this application or preceding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

June 27, 2002


KENNETH ALLEN PARKER
PRIMARY PATENT EXAMINER
GAU 2871